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Chronic CAD/Stable Ischemic Heart Disease

THE EFFECT OF TRIFLUSAL ON PRIMARY VASCULAR DYSREGULATION COMPARED WITH ACETYLSALICYLIC ACID: A DOUBLE-BLIND PROSPECTIVE RANDOMIZED CONTROLLED CROSS-OVER TRIAL

Poster Contributions
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Authors: *Sanghoon Shin, Hyuk-Jae Chang, Geu-Ru Hong, Jong-Won Ha, Yangsoo Jang, Namsik Chung, Severance Cardiovascular Hospital, Seoul, South Korea*

Objective: Primary vascular dysregulation (PVD) is defined as an inherited tendency to respond inappropriately to stimuli such as coldness or emotional stress and cold extremities are the leading symptom. Triflusal is chemically related to acetylsalicylic acid (ASA). But, in contrast to ASA, it leaves intact the arachidonic acid pathway, favors the production of nitric oxide and increase the concentration of cyclic nucleotide in endothelial cells, resulting to expand peripheral blood vessels. In this study, we explored the efficacy of triflusal on PVD compared with ASA in a setting of double-blind prospective randomized controlled cross-over design.

Methods: Eighty-nine PVD patients (54% female, 56 ± 8 years) were randomized to receive either triflusal (600mg, qd) or ASA (300 mg, qd) for a period of 6 weeks followed by cross-over. PVD was defined as both red blood cell stand-still in video-assisted microscopic capilloscopy during cold stimulation using carbon dioxide gas and a score more than 7 points in a validated questionnare. Efficacy of treatment was assessed by (1) cold intolerance symptom score (CISS), (2) Finger Doppler indices, and (3) indocyanine green (ICG) perfusion imaging.

Results: Both triflusal and ASA showed improvement in CISS and peak systolic velocity on Finger Doppler compared with baseline. However, the changes of CISS (19.5 ± 17.8 vs. 12.5 ± 16.7, $p<0.001$) and mean radial PSV (66.3 ± 16.4 vs. 69.6 ± 16.7, $p=0.004$) were more prominent in triflusal than ASA. Furthermore, the incidence of CISS improvement (> 10 point) were greater in triflusal than ASA (70.8% vs. 49.4%, $p<0.001$). In perfusion rate on ICG perfusion imaging, significant differences were also observed in triflusal compared to baseline (41.9 ± 27.6 vs. 51.1 ± 27.3, $p<0.001$) but not in aspirin.

Conclusions: Triflusal was more effective and consistent impacts on the improvement of symptoms and blood flow in patients with PVD, compared with ASA. Therefore, in patients with PVD, Triflusal might be considered as a treatment option.